SEQUENCE LISTING

<110> YEH, EDWARD T.H.
      GONG, LIMIN

<120> COMPOSITION AND METHODS RELATING TO SENP1 - A
      SENTRIN-SPECIFIC PROTEASE

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<141> 2000-07-31

<150> 60/146,774
<151> 1999-07-31

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<170> PatentIn Ver. 2.1

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        35                  40                  45

Ser Arg Gln Gly His Leu Asp Arg Ser Phe Thr Cys Ser Thr Arg Ser
    50                  55                  60

Ala Ala Tyr Asn Pro Ser Tyr Tyr Ser Asp Asn Pro Ser Ser Asp Ser
65                  70                  75                  80

Phe Leu Gly Ser Gly Asp Leu Arg Thr Phe Gly Gln Ser Ala Asn Gly
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Arg Asn Ser Arg Ser Leu Tyr Leu Glu Thr Arg Lys Thr Ser Ser Gly
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Ala Tyr Glu Lys Ser Phe Pro Ile Lys Pro Val Pro Ser Pro Ser Trp
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Ser Gly Ser Cys Arg Arg Ser Leu Leu Ser Pro Lys Lys Thr Gln Arg
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Ser Ile Leu Thr Asn Gln Glu Gln Leu Ser His Ser Val Tyr Ser Leu
            260             265             270

Ser Ser Tyr Thr Pro Asp Val Ala Phe Gly Ser Lys Asp Ser Gly Thr
        275             280             285

Leu His His Pro His His His His Ser Val Pro His Gln Pro Asp Asn
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Leu Ala Ala Ser Asn Thr Gln Ser Glu Gly Ser Asp Ser Val Ile Leu
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Leu Lys Val Lys Asp Ser Gln Thr Pro Thr Pro Ser Ser Thr Phe Phe
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Gln Ala Glu Leu Trp Ile Lys Glu Leu Thr Ser Val Tyr Asp Ser Arg
            340             345             350

Ala Arg Glu Arg Leu Arg Gln Ile Glu Glu Gln Lys Ala Leu Ala Leu
        355             360             365

Gln Leu Gln Asn Gln Arg Leu Gln Glu Arg Glu His Ser Val His Asp
    370             375             380

Ser Val Glu Leu His Leu Arg Val Pro Leu Glu Lys Glu Ile Pro Val
385             390             395             400

Thr Val Val Gln Glu Thr Gln Lys Lys Gly His Lys Leu Thr Asp Ser
            405             410             415

Glu Asp Glu Phe Pro Glu Ile Thr Glu Glu Met Glu Lys Glu Ile Lys
            420             425             430

Asn Val Phe Arg Asn Gly Asn Gln Asp Glu Val Leu Ser Glu Ala Phe
            435             440             445

Arg Leu Thr Ile Thr Arg Lys Asp Ile Gln Thr Leu Asn His Leu Asn
    450             455             460

Trp Leu Asn Asp Glu Ile Ile Asn Phe Tyr Met Asn Met Leu Met Glu
465             470             475             480

Arg Ser Lys Glu Lys Gly Leu Pro Ser Val His Ala Phe Asn Thr Phe
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Phe Phe Thr Lys Leu Lys Thr Ala Gly Tyr Gln Ala Val Lys Arg Trp
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Arg Ile Leu Leu Gln Tyr Leu Lys Gln Glu Ser Ile Asp Lys Lys Arg
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Lys Glu Phe Asp Thr Asn Gly Trp Gln Leu Phe Ser Lys Lys Ser Gln
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Tyr Ala Asp Cys Ile Thr Lys Asp Arg Pro Ile Asn Phe Thr Gln Gln
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            35                  40                  45

Asp Tyr Pro Lys Ile Arg Val Thr Val Thr Arg Asp Gln Pro Arg Arg
        50                  55                  60

Val Leu Pro Ser Phe Gly Phe Thr Leu Asn Ser Glu Gly Cys Asn Arg
 65                  70                  75                  80

Arg Pro Gly Gly Arg Arg His Ser Lys Gly Asn Pro Glu Ser Ser Leu
                85                  90                  95

Met Trp Lys Pro Gln Glu Gln Ala Val Thr Glu Met Ile Ser Glu Glu
            100                 105                 110

Ser Gly Lys Gly Leu Arg Arg Pro His Cys Thr Val Glu Glu Gly Val
        115                 120                 125

Gln Lys Glu Glu Arg Glu Lys Tyr Arg Lys Leu Leu Glu Arg Leu Lys
    130                 135                 140

Glu Ser Gly His Gly Asn Ser Val Cys Pro Val Thr Ser Asn Tyr His
145                 150                 155                 160

Ser Ser Gln Arg Ser Gln Met Asp Thr Leu Lys Thr Lys Gly Trp Gly
                165                 170                 175

Glu Glu Gln Asn His Gly Val Lys Thr Thr Gln Phe Val Pro Lys Gln
            180                 185                 190

Tyr Arg Leu Val Glu Thr Arg Gly Pro Leu Cys Ser Leu Arg Ser Glu
        195                 200                 205
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Lys Arg Cys Ser Lys Gly Lys Ile Thr Asp Thr Glu Lys Met Val Gly
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Ile Arg Phe Glu Asn Glu Ser Arg Arg Gly Tyr Gln Leu Glu Pro Asp
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Leu Ser Glu Glu Val Ser Ala Arg Leu Arg Leu Gly Ser Gly Ser Asn
            245             250             255

Gly Leu Leu Arg Arg Lys Val Ser Ile Ile Glu Thr Lys Glu Lys Asn
        260             265             270

Cys Ser Gly Lys Glu Arg Asp Arg Arg Thr Asp Asp Leu Leu Glu Leu
        275             280             285

Thr Glu Asp Met Glu Lys Glu Ile Ser Asn Ala Leu Gly His Gly Pro
    290             295             300

Gln Asp Glu Ile Leu Ser Ser Ala Phe Lys Leu Arg Ile Thr Arg Gly
305             310             315                     320

Asp Ile Gln Thr Leu Lys Asn Tyr His Trp Leu Asn Asp Glu Val Ile
            325             330             335

Asn Phe Tyr Met Asn Leu Leu Val Glu Arg Asn Lys Lys Gln Gly Tyr
            340             345             350

Pro Ala Leu His Val Phe Ser Thr Phe Phe Tyr Pro Lys Leu Lys Ser
        355             360             365

Gly Gly Tyr Gln Ala Val Lys Arg Trp Thr Lys Gly Val Asn Leu Phe
    370             375             380

Glu Gln Glu Ile Ile Leu Val Pro Ile His Arg Lys Val His Trp Ser
385             390             395                     400

Leu Val Val Ile Asp Leu Arg Lys Lys Cys Leu Lys Tyr Leu Asp Ser
            405             410             415

Met Gly Gln Lys Gly His Arg Ile Cys Glu Ile Leu Leu Gln Tyr Leu
        420             425             430

Gln Asp Glu Ser Lys Thr Lys Arg Asn Ser Asp Leu Asn Leu Leu Glu
        435             440             445

Trp Thr His His Ser Met Lys Pro His Glu Ile Pro Gln Gln Leu Asn
    450             455             460

Gly Ser Asp Cys Gly Met Phe Thr Cys Lys Tyr Ala Asp Tyr Ile Ser
465             470             475                     480

Arg Asp Lys Pro Ile Thr Phe Thr Gln His Gln Met Pro Leu Phe Arg
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Lys Lys Met Val Trp Glu Ile Leu His Gln Gln Leu Leu
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65   70   75   80

Glu Glu Asp Glu Glu Glu Val Ala Ala Trp Arg Leu Pro Pro Arg Trp
           85   90   95

Gly Gln Leu Gly Ala Ser Gln Arg Ser Arg Ala Leu Arg Pro Ser His
        100   105   110

Arg Lys Thr Cys Ser Gln Arg Arg Arg Ala Met Arg Ala Phe Gln
      115   120   125

Met Leu Leu Tyr Ser Lys Ser Thr Ser Leu Thr Phe His Trp Lys Leu
    130   135   140

Trp Gly Arg His Arg Gly Arg Arg Arg Gly Leu Ala His Pro Lys Asn
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His Leu Ser Pro Gln Gln Gly Gly Ala Thr Pro Gln Val Pro Ser Pro
        165   170   175

Cys Cys Arg Phe Asp Ser Pro Arg Gly Pro Pro Pro Arg Leu Gly
      180   185   190

Leu Leu Gly Ala Leu Met Ala Glu Asp Gly Val Arg Gly Ser Pro Pro
      195   200   205

Val Pro Ser Gly Pro Pro Met Glu Glu Asp Gly Leu Arg Trp Thr Pro
   210   215   220

Lys Ser Pro Leu Asp Pro Asp Ser Gly Leu Leu Ser Cys Thr Leu Pro
225   230   235   240

Asn Gly Phe Gly Gly Gln Ser Gly Pro Glu Gly Glu Arg Ser Leu Ala
        245   250   255

Pro Pro Asp Ala Ser Ile Leu Ile Ser Asn Val Cys Ser Ile Gly Asp
      260   265   270

His Val Ala Gln Glu Leu Phe Gln Gly Ser Asp Leu Gly Met Ala Glu
      275   280   285

Glu Ala Glu Arg Pro Gly Glu Lys Ala Gly Gln His Ser Pro Leu Arg
   290   295   300

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305   310   315   320

Thr Tyr Gly Ser Leu Ile Pro Leu Ser Thr Asp Glu Val Val Glu Lys
        325   330   335

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            340                 345                 350

Leu Val Leu Gln Leu Ile Gln Ser Tyr Gln Arg Met Pro Gly Asn Ala
            355                 360                 365

Met Val Arg Gly Phe Arg Val Ala Tyr Lys Arg His Val Leu Thr Met
    370                 375                 380

Asp Asp Leu Gly Thr Leu Tyr Gly Gln Asn Trp Leu Asn Asp Gln Val
385                 390                 395                 400

Met Asn Met Tyr Gly Asp Leu Val Met Asp Thr Val Pro Glu Lys Val
                405                 410                 415

His Phe Phe Asn Ser Phe Phe Tyr Asp Lys Leu Arg Thr Lys Gly Tyr
            420                 425                 430

Asp Gly Val Lys Arg Trp Thr Lys Asn Val Asp Ile Phe Asn Lys Glu
            435                 440                 445

Leu Leu Leu Ile Pro Ile His Leu Glu Val His Trp Ser Leu Ile Ser
    450                 455                 460

Val Asp Val Arg Arg Arg Thr Ile Thr Tyr Phe Asp Ser Gln Arg Thr
465                 470                 475                 480

Leu Asn Arg Arg Cys Pro Lys His Ile Ala Lys Tyr Leu Gln Ala Glu
            485                 490                 495

Ala Val Lys Lys Asp Arg Leu Asp Phe His Gln Gly Trp Lys Gly Tyr
            500                 505                 510

Phe Lys Met Asn Val Ala Arg Gln Asn Asn Asp Ser Asp Cys Gly Ala
            515                 520                 525

Phe Val Leu Gln Tyr Cys Lys His Leu Ala Leu Ser Gln Pro Phe Ser
    530                 535                 540

Phe Thr Gln Gln Asp Met Pro Lys Leu Arg Arg Gln Ile Tyr Lys Glu
545                 550                 555                 560

Leu Cys His Cys Lys Leu Thr Val
            565
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